

WE CLAIM:

1. A Desert hedgehog protein of human origin.
2. The hedgehog protein of claim 1, which ~~contains~~ ^{consists of} a part or the whole of the amino acid sequence of SEQ ID NO:1.
3. The hedgehog protein of claim 1, which ~~contains~~ ^{consists of} a part or the whole of the amino acid sequence of SEQ ID NO:2.
4. The hedgehog protein of claim 1, which ~~contains~~ ^{consists of} a part or the whole of the amino acid sequence of SEQ ID NO:3.
5. The hedgehog protein of claim 1, which originates from a human cell.
6. The hedgehog protein of claim 1, which originates from established human cell line ARH-77, ATCC CRL-1621.
7. A DNA which encodes the hedgehog protein of claim 1.
8. The DNA of claim 7, which contains a part or the whole of either the nucleotide sequence of SEQ ID NO:4 or its complementary nucleotide sequence.
9. The DNA of claim 7, which contains a part or the whole of either the nucleotide sequence of SEQ ID NO:5 or its complementary nucleotide sequence.
10. The DNA of claim 7, which contains a part or the whole of either the nucleotide sequence of SEQ ID NO:6 or its complementary nucleotide sequence.
11. The DNA of claim 7, wherein, based on the degeneracy of genetic codes, one or more nucleotides are replaced with different nucleotides while conserving the encoding amino acid sequence.
12. The DNA of claim 7, which is inserted into an

autonomously replicable vector.

13. The DNA of claim 7, which is introduced into an appropriate host.

14. A monoclonal antibody which recognizes the hedgehog protein of claim 1.

15. The monoclonal antibody of claim 14, which additionally recognizes a Sonic hedgehog protein of human origin.

16. A hybridoma capable of producing a monoclonal antibody which recognizes the hedgehog protein of claim 1.

17. A process for producing a hedgehog protein which comprises the steps of allowing to express a DNA that encodes the hedgehog protein of claim 1 and collecting the generated hedgehog protein.

18. The process of claim 17, wherein the DNA is expressed through culturing of a transformant introduced with a DNA that encodes the hedgehog protein of claim 1.

19. The process of claim 17, wherein the generated hedgehog protein is collected by salting out, dialysis, filtration, concentration, fractional precipitation, ion-exchange chromatography, gel filtration chromatography, adsorption chromatography, isoelectric focusing chromatography, hydrophobic chromatography, reversed phase chromatography, affinity chromatography, gel electrophoresis and/or isoelectric focusing gel electrophoresis.

20. The process of claim 17, wherein the generated hedgehog protein is collected through immunoaffinity chromatography using a monoclonal antibody that recognizes a Desert hedgehog protein of human origin.

21. A method for detecting a hedgehog protein which

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comprises the steps of bringing a monoclonal antibody that recognizes the hedgehog protein of claim 1 into contact with a sample and detecting the hedgehog protein based on an immunoreaction.

22. The method of claim 21, wherein the monoclonal antibody is labelled with a radioactive substance, enzyme and/or fluorescent substance.

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